PATENT COOPERATION TREATY



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

Anslation internation	PATENT COOPER PC		ATY			
and internation	CRNATIONAL PRELIMINARY EXAMINATION REPORT					
	(PCT Article 3	5 and Rule 70)	•			
Applicant's or agent's file reference 47275/A27/DR	FOR FURTHER ACT		ication of Transmittal of Internation Examination Report (Form PCT/IPEA/41			
International application No. PCT/EP2003/009374	International filing date (day/month/year) Priority date (day/month/year) 23 August 2003 (23.08.2003) 31 August 2002 (31.08.2					
International Patent Classification (IPC) or n F24F 5/00, F25D 3/08, A41D 13		PC .				
Applicant ENTRAK ENERGIE- UND ANTRIEBSTECHNIK GMBH & CO. KG						
 This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36. This REPORT consists of a total of5 sheets, including this cover sheet. 						
This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have to amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Investment of the Administrative Instructions under the PCT). These annexes consist of a total of sheets. 3. This report contains indications relating to the following items:						
						I Basis of the report
II Priority						
III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability						
IV Lack of unity of in						
Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI Certain documents cited						
					VII Certain defects in	the international applicati
VIII Certain observation	ons on the international ap	olication				
Date of submission of the demand		Date of completion	n of this report			
11 December 2003 (11	.12.2003)	(01 June 2004 (01.06.2004)			
Name and mailing address of the IPEA/E	P	Authorized office	r			
Facsimile No.		Telephone No.				

International application No.

PCT/EP2003/009374

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

I.	I. Basis of the report								
1.	With	egard to the elements o	f the international applic	ation:*					
		the international applica	ation as originally filed		•				
	$\overline{\boxtimes}$	the description:				.			
		pages	<u> </u>	1-15		, as originally filed			
		pages				, filed with the demand			
		pages			, filed with the letter of				
	\square	the claims:				•			
	بريا	pages	•	·	•	, as originally filed			
		pages #				er with any statement under Article 19			
		pages		<u> </u>		, filed with the demand			
		pages	1-33		, filed with the letter of	17 February 2004 (17.02.2004)			
	\square	the drawings:	-						
	لكا	-		1/3-3/3		, as originally filed			
		pages				, filed with the demand			
		pages			, filed with the letter of				
	<u> </u>	he sequence listing part			•				
			•			as saistus III. SI. J			
						, as originally filed			
		pages			filed with the letter of	, filed with the demand			
3	the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/ or 55.3). With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing: contained in the international application in written form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.								
	in t	the description the claims, No the drawings, at the drawings, at the drawings the disclosure description as the discrepent that the discrepent as the discre	as filed, as indicated in t ave been furnished to th ly filed" and are not	of) the amendmenthe Supplement the receiving Officiannexed to this	tal Box (Rule 70.2(c)).** Fice in response to an inv	vitation under Article 14 are referred to not contain amendments (Rule 70.16			

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/EP 03/09374

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1.	Statement			•
	Novelty (N)	Claims	1-33	YES
		Claims		NO
	Inventive step (IS)	Claims	1-33	YES
		Claims		NO "
	Industrial applicability (IA)	Claims	1-33	YES
		Claims		NO

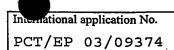
2. Citations and explanations

Document US-A-6 257 011 (D1) describes a wearable cooling device, in particular a personal cooling apparatus, with a small-scale casing (30) having a casing section containing a latent heat accumulator (60; see figures 3 and 5 and column 5, lines 60-67), said casing being provided with an intake (16, see figure 3) for a heat-exchanging gaseous medium (air) to be conducted past the latent heat accumulator and with an outlet (32; see figure 3) for releasing the cooled medium, and having a conveying means (65), which can be operated by an energy supply (batteries; see column 6, lines 18-22) provided in the casing, for conveying said medium for the self-sufficient operation of the cooling device.

A similar cooling device having these features is also known inter alia from document FR-A-2679017 (D2).

The invention according to claim 1 differs in that, at a position located downstream from the latent heat accumulator, a flap-like actuator (17) is provided by means of which it is possible to vary the degree of opening of a first medium channel (6), which conducts said medium past the latent heat accumulator (4), and of a second medium channel (18), which does not conduct the

INTERNATIONAL PRELIMINARY EXAMINATION REPORT



medium that is fed into the casing (2) past the latent heat accumulator.

This embodiment permits the mixing of cooled and uncooled medium. In this way, the user can regulate the temperature. An embodiment such as this with an actuator is not described by the available prior art nor can it be derived without exercising inventive skill. By contrast, the available documents show only a single medium channel.

Therefore, the novelty and the inventive step of claim 1 is acknowledged, and claim 1 satisfies the requirements of PCT Article 33.

The novelty, inventive step and industrial applicability of claims 2 to 30, which contain other developments of claim 1, are established by their dependence upon claim 1. Claims 31 and 32 relate to a cooling system comprising a cooling device according to one of claims 1 to 30. Claims 31 and 32 thus contain all of the features of claim 1 and therefore also satisfy the requirements of PCT Article 33. Claim 33 relates to a method for cooling a person which also employs a cooling device according to one of claims 1 to 30. Therefore, claim 33 likewise satisfies the requirements of PCT Article 33.